

AFCONA-4080



Chemical Composition

Modified polyurethane polymer.

Product general description

A high molecular weight polymeric dispersant for de-flocculation of all types of pigments.

Product Properties

AFCONA-4080 is a highly effective polymeric dispersant for stabilizing inorganic and organic pigments as well as carbon blacks. Through effective steric hindrance, it provides very good stability for all types of pigments.

AFCONA-4080 offers the following advantages:

- Improved gloss and DOI, reduced haziness
- Prevention of flooding problems
- Higher colour strength
- Lower viscosity

AFCONA-4080 has the highest molecular weight compared to all other AFCONA polyurethane dispersants. Thus, it performs excellently in organic red, yellow and violet pigments.

The characteristics and recommended systems for AFCONA-4080 are as follows:

- 1) AFCONA-4080 has a very low amine value, which makes it highly suitable for epoxy based pigment pastes, as it will not negatively affect the shelf life. In addition, the very high molecular weight of AFCONA-4080 further shields the amine groups of the dispersant, resulting in less contact with the epoxy resin in the pigment paste.
- 2) AFCONA-4080 is designed for automotive OEM and refinishes topcoats, epoxies, coil coatings and other high-quality industrial solvent-based coatings. Many of the newer types of high-solid resin systems or oil-free polyesters cause significant flocculation problems, which often can be solved by using AFCONA-4080.
- 3) AFCONA-4080 is a very effective dispersant for all kinds of UV coatings and fluorocarbon-based coil and can coatings.

Note: AFCONA-4080 may become slightly hazy when stored at or below 5°C. That will not influence the quality.

Product Specification

Non-volatile matter	29 - 31% (150°C, 0.5h)
Solvent	Butyl Acetate/Propylene glycol methyl ether acetate/Sec-butanol
Density	0.94 - 0.97 g/cm ³ (20°C)
Amine Value	6 - 16 mg KOH/g
Gardner color	Max.8
Flash point	47°C
Appearance	Clear, yellowish/slightly hazy liquid (25°C)

Addition and dosage

Calculation method for the required amount of non-volatile matter on pigment:

TiO ₂ :	2-3%
Other inorganic pigments :	2-4%
Organic pigments :	20-40%
Carbon blacks :	20-60%

Incorporation

AFCONA-4080 should be incorporated in the mill base before adding the pigments.

Storage

AFCONA-4080 shall be stored in cool and dry place away from direct sunlight. Shelf-life is 5 years from the date of manufacturer, if kept in original and unopened container. The expiring date is indicated on the package.

Packaging

25kg and 190kg non-returnable containers

For product safety information: please refer to the product SDS.

AFCONA ADDITIVES

Web Site : www.afcona.com

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This version replaces all previous ones.